

# Spencer Eanes

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## EDUCATION

### ST. OLAF COLLEGE

Northfield, MN

Graduation: May 2020

#### DEGREES

B.A. Mathematics

B.A. Computer Science

Concentration in Statistics  
& Data Science

#### OVERALL

Cum. GPA: 3.88 / 4.0

Dean's List:

All semesters to date

### EVANSTON TWP. HS

EVANSTON, IL.

ACT: 34

Graduated May 2016

with High Distinction

## COURSEWORK

#### IN PROGRESS

Differential Equations 2

Adv Statistical Modeling

#### COMPLETED

Algrms for Decision Making

Algrms & Data Structures

Statistical Modeling

Data Management

Linear Algebra

Calculus I-III

## SKILLS

#### LANGUAGES

R • Python • SQL

Mathematica • C++

#### TOOLS

Bash • Git • LaTeX

## OTHERS

#### EXTRACURRICULARS

Studied abroad in

Aberdeen, Scotland

REAL Training

Tutoring

Stewardship Assistant

#### LINKS

SpencerEanes.org

linkedin.com/in/SpencerEanes

github.com/SpencerEanes

## EXPERIENCE

### ZS ASSOCIATES | DECISION ANALYTICS ASSOCIATE INTERN

JUNE – AUG 2019 | EVANSTON, IL

- Measured the business impact of a >\$100 million dollar patient services program of a F200 biopharma using test-control analyses on claim and patient level data.
- Created long-term forecast for the new formulation of a blockbuster immunology product; results presented to a brand senior VP.
- Communicated effectively in person and by email in client interactions, project presentations, and work handoffs with the India team.

### NATL. CENTER FOR EDUCATION STATISTICS | JPSM JUNIOR FELLOW

MAY – AUG 2018 | WASHINGTON, DISTRICT OF COLUMBIA

- Selected by University of Maryland Joint Program in Survey Methodology for Junior Fellow summer position, interning at NCES.
- Statistically analyzed federal datasets, 2015-16 School Survey on Crime and Safety and 2016 National Household Education Survey. Publication on cyberbullying and cell phone use from NCES in January 2019.

### ST. OLAF CENTER FOR UNDERGRADUATE RESEARCH | RESEARCHER

MAY – AUG 2017 | NORTHFIELD, MN

- 10-week team oriented research experience. Research was presented at the Northfield Research Colloquium and the Midstates Math Consortium.
- Investigated the use of lie symmetries in the invariantization of numerical schemes, and compared the accuracy of invariant vs. non-invariant numerical schemes applied to differential equations.

## PROJECTS

### POLYGON VISIBILITY WEB APP | DEVELOPER

MAY 2019 | COMPUTATIONAL GEOMETRY FINAL PROJECT

Implemented a fast polygon visibility graph algorithm to compute visibility edges between vertices of polygons in  $O(n^2 \log n)$  time. Built code in R using the SF package, and created a RShiny interactive web application, available at SpencerEanes.org. Paper and code available at github.com/SpencerEanes.

### MMA CLUSTERING ANALYSIS | ANALYST

MAY 2019 | ALGORITHMS FOR DECISION MAKING FINAL PROJECT

Scraped data on over 3000 UFC fighters from ufcstats.com using R. Cleaned and formatted the dataset and performed principal component analysis. Compared k-means clustering and hierarchical clustering, and predicted fighters win-loss ratio using penalized logistic regression. Results available at SpencerEanes.org.

### COMAP ICM 2018 PROBLEM D | TEAM MEMBER

Developed a mathematical model for optimal placement of electric vehicle charging stations and proposed a plan to convert a nation from gas to electric vehicles.

## AWARDS

2018	International	CoMAP ICM Competitor, Honorable Mention
2017	National	USCLAP Introductory Statistics First Prize Winner
2016	Institutional	St. Olaf Buntrock Scholar, Highest Academic Scholarship
2016	National	National Merit Commended Scholar